ART. II.—On some Pselaphidae of the Howitt Collection.

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Mr. Jas. A. Kershaw, of the National Museum, recently kindly allowed me to examine the following *Pselaphidae*, of the Howitt collection, bearing King's original name labels:—

Ctenistes vernalis, King (Trans. Ent. Soc., N.S.W., I., pp. 40, 102, 300).

Rytus punctatus, King (*l. c.* pp. 103, 303).

R. victoriae, King¹ (*l. c.* p. 304).

Tyrus howitti, King² (*l. c.* p. 301).

Bryaxis ater, King (*l. c.* j. 309).

Bythinus niger, King (*l. c.* p. 312).

Euplectus excisus, King (*l. c.* p. 313).

All of these I re-mounted so as to examine the under surface and legs. As the original descriptions are extremely brief, more detailed ones may be acceptable to workers in the family.

Ctenistes vernalis, King (now Ctenisophus vernalis, King).

King's label, "Ctenistes vernalis, R.L.K. (Tmesiphorus vernalis), Paramatta."

Two specimens (sexes) from the original locality, and probably therefore co-types. They are certainly different to the species identified by myself (from comparison with the type, but without examination of the under surface), sent to Raffray under that name, and described by him³; and which species has the abdomen very feebly impressed in the male.

The supposed co-types exactly resemble that species on the upper surface, and have the antennae as in both sexes of that species, but the third ventral segment has a rather strong

¹ Not Tychus howitti, King.

² Not Tyrus victoriae, King.

³ Proc. Linn. Soc. N.S. Wales, 1900, p. 208.

transverse impression, bounded on the hinder margin by two distinct oblique obtuse ridges, which do not quite meet. From some directions the abdomen appears feebly longitudinally impressed from base to apex, with the ridges like two distinct and fairly distant tubercles. The spines on the under surface of the head are thin and acute.

The ventral impressions on the males of this genus are the most satisfactory characters for the identification of the species, and in King's descriptions are not even mentioned.

I believe the Howitt specimens to be correctly named, but the species of this genus so strongly resemble each other that King may have been mistaken, and it is very desirable that the ventral impression of the type should be examined and described.

Rytus punctatus, King (now Rytus subulatus King).

King's label, "Rytus punctatus, R.L.K. (Tyrus subulatus), Paramatta."

First described by King as Tyrus subulatus, but later mentioned as the type of the (then) new genus Rytus, but the name altered, without sufficient cause, to punctatus.

As the essential features of the species are re-described by Raffray, there is no need to re-describe the Howitt specimen.

King recorded the types as from Parramatta and Dunheved; the Howitt specimen is from Parramatta; a co-type in my own collection is from Dunheved, and I have others from the Richmond River and Windsor.

Rytus victoriae, King.

King's label, "Rytus victoriae, R.L.K."

Type ?. Reddish castaneous, head and prothorax darker, palpi and tarsi flavous. With rather long pale pubescence.

Head rather long, with small punctures, with a fairly deep fovea of moderate size close to each eye. Antennary tubercles fairly prominent. Antennae passing middle coxae, first joint as long as second and third combined, second slightly longer

¹ Proc. Linn. Soc. N.S. Wales, 1900, p. 239.

than third, third to eighth subequal, ninth larger and wider, its apex with a short connecting piece, tenth of similar shape but somewhat larger, eleventh ovate, the length of three preceding combined. Palpi about three-fourths the length of antennae. first (apparent) joint long and thin, but at apex suddenly inflated and subglobular, second not half the length of first, base thin, but rather strongly inflated to apex, third not much shorter than first, base with an inflated portion somewhat larger than that of first, thence thin to apex, but thinnest just in front of inflated part, apex with a short seta. Prothorar wider than long, greatest width near apex, thence regularly decreasing in width to base; with small sparse punctures. Elytra slightly wider than long; almost impunctuate, each with two basal impressions, one at base of a distinct subsutural stria, the other between it and side, with a short rearward extension, but too short to be considered a stria. Metasternum very gently concave in middle. Abdomen non-foveate. Leas Length, 2 mm.

Hab. Victoria.

The specimen redescribed is certainly the type, as King stated that it was unique in the collection of Dr. Howitt. It is readily distinguished from *subulatus* by the feeble punctures. Raffray regards it as the probable female of *emarginatus*, King²

Tyrus howitti, King (now Tyromorphus howitti, King).

King's label "Tyrus Howitti King."

Type &. Reddish castaneous, appendages somewhat paler. With pale, evenly (but not densely) distributed pubescence.

Head convex, with dense and rather coarse punctures; antennary tubercles moderately raised. Antennae extending to middle coxae, first joint about twice as long as second, second slightly longer than third, the others to eighth very feebly decreasing in length, ninth distinctly wider, and longer than eighth, tenth still longer and wider, eleventh ovate, slightly

¹ Proc. Linn. Soc. N.S. Wales, 1900, p. 239.

² In the synonymy he gives emarginatus as first referred to Tyrus, but this is incorrect.

longer than ninth and tenth combined. Palpi with first (apparent) joint long, basal half thin, apical half strongly inflated and subelliptic in outline; second about as long as inflated part of first and somewhat thinner, third slightly longer and somewhat thinner than second, Prothorax about as long as greatest width, which is about apical fourth, sides strongly narrowed to apex, and moderately to base, which is slightly wider than apex; with a feeble median subbasal impression; punctures as on head but rather sparser. Elytra distinctly wider than long, shoulders strongly rounded, sides rounded and increasing in width almost to apex; each at base with two small foveiform impressions, one at base of a strong subsutural stria, the other marking the base of a short impression, which is much too short to be regarded as a stria; punctures rather sparser than on prothorax. Upper surface of abdomen with small punctures; lower surface without fovea. Metasternum widely and shallowly impressed in middle. Legs rather long and thin; front trochanters each with a large truncated tooth; front femora each with a rather small but distinct subbasal tooth; front tibiae moderately curved. Length, 2 (vix) mm.

Hah.—Victoria.

This species was omitted from Raffray's recent generic monograph of the family, probably on account of their being a Tychus howitti, King (now referred to Tyraphus). It belongs to Tyromorphus, and in general sculpture is close to cribratus, but differs in being smaller and somewhat differently sculptured. In general appearance it is remarkably close to Rytus subulatus, but has very different palpi. The second segment of abdomen on its lower surface, appears to have a very feeble ridge across middle of apex, but this is invisible from most directions.

Bryaris ater, King (now Eupines atra, King).

King's label "Bryaxis ater, R.L.K.," and a label "Dandenong" in another hand.

Type 2. Black, appendages piceous brown, but antennae somewhat darker than legs. Almost glabrous.

Head smooth and without impressions. Antennae rather short, first joint fairly stout, second as stout as first, but much

shorter, third to ninth small, tenth short but strongly transverse, eleventh large and ovate. *Prothorax* lightly transverse, sides rather strongly rounded near apex, and gently decreasing in width to base; disc without impressions. *Elytra* slightly longer than wide, sides sub-parallel, shoulders rounded; finely striate close to suture, but not elsewhere. Apex of *metasternum* gently impressed in middle. *Abdomen* non-foveate. *Legs* nondentate. Length, 1 (vix) num.

Hab.-Victoria (Dandenong Ranges).

The species also occurrs in Tasmania, as I have the sexes from the Huon River, the female of which agrees well with the type. The male differs in having the metasternum strongly and widely impressed; second segment of abdomen very feebly impressed (scarcely more than flattened) in middle, and apical segment lightly curved at tip, so that from some directions it appears to have a small apical tubercle. On the type the two apical joints of antennae form the club, the tenth being wide but short; the ninth is also transverse, but could scarcely be regarded as part of the club. The male has very similar antennae except that the two apical joints are somewhat larger.

Bythinus niger, King (now Eupines nigra, King).

King's label, "Bythinus niger, R.L.K."

Type 9. Castaneous brown, legs paler, antennae darker. Almost glabrous.

Head smooth. Antennae moderately long, first joint rather stout, second as stout as but shorter than first, third to eighth small, ninth distinctly wider than preceding joints, tenth larger and more transverse, eleventh ovate. Prothorax moderately transverse, sides widest at apical two-fifths, thence subarcuate to base, without discal impressions. Elytra very little longer than wide, shoulders rounded, sides gently rounded and increasing in width to near apex, finely striate near suture, but not elsewhere. Metasternum feebly impressed along middle. Abdomen non-foveate. Legs non-dentate. Length, 1 mm.

Hab.—Victoria.

Quite an ordinary looking *Eupines*. The specimen redescribed is certainly the type as King says "In Dr. Howitt's coll."

All that he says of colour is "niger," possibly the colour has somewhat faded (it is between 40 and 50 years since it was taken), but King appeared to regard almost all fairly dark browns as black. The club might fairly be regarded as three jointed, although the ninth joint is rather small; the eleventh is rather large, but not much wider than tenth. On each side of the head there are two very feeble impressions, invisible from most directions, one in front and one just above the eye.

There are before me two females and one male from Tasmania (Huon River) that appear to belong to this species. They differ in being considerably darker (a common occurrence with Tasmanian insects of all orders), with the impressions on the head still very faint, but rather more noticeable. The male differs from the female in having the club larger, with the ninth and tenth joints more transverse. Metasternum widely impressed and subcarinated on each side of middle. From some directions its first ventral segment appears to have a large semicircular excavation at apex, bounded on each side by a small distinct tubercle; from other directions both tubercles and excavation are indistinct. The apical segment has a small circular impression.

Euplectus excisus, King (now Euplectops excisus, King).

King's label "Euplectus excisus, King," and a label "Dandenong" in another hand.

3 ? Reddish-testaceous, legs and palpi paler. Clothed with short pale pubescence; sides with a few scattered hairs.

Head with a deep fovea on each side, the two opening out and conjoined in front, so as to give the appearance of a wide semicircular impression, middle of base with a short longitudinal impression. Antennae just passing middle coxae; first joint as long as second and third combined, second globular, slightly longer than third, fourth to eighth short and transverse, ninth scarcely longer but distinctly wider than eighth, tenth slightly longer and distinctly wider than ninth, eleventh ovate, base truncate, almost as long as three preceding combined. Prothorax distinctly transverse, sides strongly rounded from apex to middle, then strongly and suddenly constricted, and

then appearing as a subtriangular extension on each side of base; with three strong, longitudinal impressions, and a deep transverse sub-basal one, the latter causing the lateral constrictions; with small scattered punctures. Elytra slightly longer than wide, shoulders rounded, sides gently rounded, each with two striae commencing in basal foveae, the subsutural one distinct throughout, the discal one distinct at base, traceable at apex, but obsolete in middle; punctures much as on prothorax. Metasternum feebly impressed along middle. Abdomen nonfoveate. Legs moderately long; trochanters each with a feeble subtriangular node or tooth; femora edentate. Length, 1 4-5ths num.

Hab .- Victoria: Dandenong.

The specimen redescribed is a co-type, if not the actual type itself, as King says, "The Dandenong Ranges Dr. Howitt." In general appearance it is fairly close to Euplectops gibbosus, but the prothoracic sculpture, although deep, is less profound, antennae somewhat shorter and stouter, with the joints of the club differently proportioned. Its clothing is also more noticeable. The abdomen has a short process projecting backwards from its tip, but I cannot make out whether it is an ovipositor or the sheath of a penis, but it is probably the latter, as the trochanters appear (from some directions) to be obtusely dentate; the third ventral segment also has a very feeble subtriangular impression at middle of apex, but which is invisible from most directions. The disc of each elytron is slightly paler than its other parts, but the shades of colour are not sharply defined.